ABSTRACT

THE EFFECT OF FOLIAR FERTILIZATIONS ON YIELD, YIELD COMPONENTS AND FIBER QUALITY PROPERTIES IN SECOND CROP COTTON (*Gossypium hirsutum* L.) CULTIVATION

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In recent years the effects of the pesticides become widespread among farmers and foliar fertilizer applications in different contents and doses without soil analysis on yield and fiber quality properties and whether the increased yield provided by these applications is economic or not are unknown. This study was conducted in Aydın, in Söke district where cotton cultivation is heavily done, in a manufacturer's field with the purpose of determining the effects of foliar fertilizer applications with different content on yield, yield components and fiber quality properties and the profitability of the yield increase provided by the fertilizations. The experiment design was randomized blocks trial design with three replications. In this study where the control group and foliar fertilizer applications are compared: it is determined that foliar fertilization affects the number of per plant and the fineness of the fiber positively. When evaluated for the final output seed cotton yield, numerically the highest yield (548.66kg / da) was found in the first foliar fertilizer application. In control application, the average seed cotton yield was measuredas 468.00 kg /da. However, the numerical difference between these two values (80.66 kg / ha) was determined to be statistically unsignificant. After all, the first foliar fertilizer application with an income increase of 116.19 Tl/da took the first place while the third application with an income increase of 68.72 Tl/da took the second place. As a result, if the studies to be conducted with the aim of determining the effect of foliar fertilizer applications on yield increase are done in various locations and years more accurate results are expected to be taken.

Key Words: cotton, short season cotton, foliar application, yield, fiber quality